

R E M A R K S

Careful review and examination of the subject application are noted and appreciated.

SUPPORT FOR THE CLAIM AMENDMENTS

Support for the claim amendments may be found in the specification, for example, on page 8 line 3 - page 9 line 2, page 11 line 15 - page 12 line 17, page 14 lines 6-21, page 18 line 14 - page 19 line 2, and FIGS. 1 and 6, as originally filed. Thus, no new matter has been added.

OBJECTION TO THE CLAIMS

The objection to claims 12, 16 and 18 for informalities has been obviated by amendment and should be withdrawn.

CLAIM REJECTIONS UNDER 35 U.S.C. §102

The rejection of claims 1 and 6-20 under 35 U.S.C. §102(b) as being anticipated by Oruga '397 has been obviated by amendment and should be withdrawn.

Oruga concerns a motion vector detecting device (Title).

Claim 1 provides a first circuit configured to (i) generate a first motion vector for a block at an integer-pel resolution and (ii) determine a single block size among a plurality of different block sizes associated with the first motion vector.

Claim 1 now explicitly provides a variable block size motion estimation process. In contrast, Oruga appears to be silent regarding a variable block size motion estimation process. Therefore, Oruga does not appear to disclose or suggest a first circuit configured to (i) generate a first motion vector for a block at an integer-pel resolution and (ii) determine a single block size among a plurality of different block sizes associated with the first motion vector, as presently claimed. Claims 11 and 20 provide language similar to claim 1.

Furthermore, Applicants' representative respectfully traverses the claim interpretation in the Office Action in which the first motion vector is generated and THEN the single block size is determined. No such sequential limitation exists in the claims. As such, the claimed invention is fully patentable over the cited reference and the rejection should be withdrawn.

Furthermore, Applicants' representative respectfully traverses the assertion in the Office Action that a shifter circuit is inherently included in the process of figs. 4A and 5 and column 5, lines 23-25 of Oruga. No basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art is provided in the Office Action as required by MPEP §2112. As such, the Office is respectfully

requested to either provide the basis in fact and/or technical reasoning or (ii) withdraw the inherency argument.

Dependent claims 6-10, 16 and 19 depend from claims 1 and 11, which are now believed to be allowable. As such, the dependent claims are fully patentable over the cited reference and the rejections should be withdrawn.

New claims 21-26 depend from claims 1 and 11, which are now believed to be allowable. As such, the new claims are fully patentable over the cited reference and should be allowed.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

The rejection of claims 2-5 under 35 U.S.C. §103(a) as being unpatentable over Oruga in view of Official Notice has been obviated by amendment and should be withdrawn.

Oruga concerns a motion vector detecting device (Title). Official Notice is taken that using a sum of absolute difference between pixels of the current block and the reference block in determining a best match to find a motion vector is a technique well known in the art.

Claim 5 provides wherein the plurality of processing elements form a three by three array generating nine of the difference values in parallel. Despite the assertion in the Office Action, figure 6 of Oruga merely "shows the center of a block for half-pel vector detection. Circles are pixels." (Oruga column 2,

lines 47-48). Nothing about the block of pixels illustrated in figure 6 of Oruga appears to teach or suggest that the pixels are processed by nine processing elements in parallel. Therefore, Oruga and Official Notice, alone or in combination, do not appear to teach or suggest that the plurality of processing elements form a three by three array generating nine of the difference values in parallel, as presently claimed. As such, claim 5 is fully patentable over the cited references and the rejection should be withdrawn.

Dependent claims 2-4 depend from claim 1, which is now believed to be allowable. As such, the dependent claim are fully patentable over the cited references and the rejections should be withdrawn.

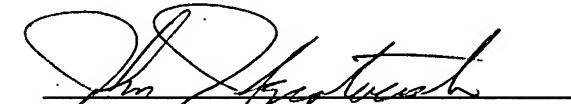
Accordingly, the present application is in condition for allowance. Early and favorable action by the Examiner is respectfully solicited.

The Examiner is respectfully invited to call the Applicants' representative between the hours of 9 a.m. and 5 p.m. ET at 586-498-0670 should it be deemed beneficial to further advance prosecution of the application.

If any additional fees are due, please charge Deposit
Account No. 12-2252.

Respectfully submitted,

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c/o Henry Groth
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